

**The Kansas Association of Teachers of Mathematics (KATM) Supports Implementation of Common Core State Standards**

*The Kansas State Board of Education (KSBE) adopted the Common Core State Standards (CCSS) on October 12, 2010. KATM acknowledges that the CCSS provides the foundation for the development of more focused and coherent instructional materials and assessments that measure students’* ***understanding*** *of mathematical concepts and acquisition of fundamental reasoning habits, in addition to their fluency with skills. Most important, the CCSS will enable teachers and education leaders to focus on improving teaching and learning, which is critical to ensuring that all students have access to a high-quality mathematics program and the support that they need to be successful. NCSM 2010*

*This document addresses questions received during the CCSS 2011 Summer Academies, hosted by KATM and KSDE.*

**Myths About the Process and Development of the *Standards***

**Myth**: No teachers were involved in writing the *Standards*.

**Fact**: The common core state standards drafting process relied on teachers and standards experts from across the country. In addition, there were many state experts that came together to create the most thoughtful and transparent process of standard setting. This was only made possible by many states working together.

For more information, please visit: www.corestandards.org

**Myth:** The *Standards* are not research or evidence based.

**Fact:** The *Standards* have made careful use of a large and growing body of evidence. The evidence base includes scholarly research; surveys on what skills are required of students entering college and workforce training programs; assessment data identifying college and career-ready performance; and comparisons to standards from high-performing states and nations. In Mathematics, the *Standards* draw on conclusions from TIMSS and other studies of high-performing countries that the traditional US mathematics curriculum must become substantially more coherent and focused in order to improve student achievement, addressing the problem of a curriculum that is *“a mile wide and an inch deep.*

**Myth**: Adopting common standards will bring all states’ standards down to the lowest common denominator, which means states with high standards, such as Massachusetts, will be taking a step backwards if they adopt the *Standards*.

**Fact**: The *Standards* are designed to build upon the most advanced current thinking about preparing all students for success in college and their careers. This will result in moving even the best state standards to the next level. In fact, since this work began, there has been an explicit agreement that no state would lower its standards. The *Standards* were informed by the best in the country, the highest international standards, and evidence and expertise about educational outcomes. We need college and career ready standards because even in high-performing states – students are graduating and passing all the required tests and still require remediation in their postsecondary work.

**Myth**: The *Standards* are not internationally benchmarked.

**Fact**: International benchmarking played a significant role in both sets of standards. In fact, the college and career ready standards include an appendix listing the evidence that was consulted in drafting the standards and the international data consulted in the benchmarking process is included in this appendix. (For more information, please visit Linda-Darling Hammond’s video here: “Big Thinkers: Linda Darling-Hammond on Becoming Internationally Competitive” below)

**Myth:** The *Standards* only include skills and do not address the importance of content knowledge.

**Fact:**  The *Standards* lay a solid foundation in whole numbers, addition, subtraction, multiplication, division, fractions, and decimals. Taken together, these elements support a student’s ability to learn and apply more demanding math concepts and procedures. The middle school and high school standards call on students to practice **applying** mathematical ways of thinking to real world issues and challenges; they **prepare students to think and reason mathematically**. The *Standards* set a rigorous definition of college and career readiness, not by piling topic upon topic, but by demanding that students develop a depth of understanding and ability to apply mathematics to novel situations, as college students and employees regularly do.

**Myth:** The *Standards* dictate (determine) the sequence of courses for students through school.

**Fact**: The *Standards* give direction on several pathways to mathematical understanding as described in Appendix A.

**Myth:** The *Standards* do not prepare or require students to learn Algebra in the 8th grade, as many states’ current standards do.   
**Fact:** The *Standards* do accommodate and prepare students for Algebra 1 in 8th grade, by including the prerequisites for this course in grades K-7. Students who master the K-7 material will be able to take Algebra 1 in 8th grade. At the same time, grade 8 standards are also included; these include rigorous algebra and will transition students effectively into a full Algebra 1 course.

**Myth:** Key math topics are missing or appear in the wrong grade.

**Fact:** The mathematical progressions presented in the common core are coherent and based on evidence. Part of the problem with having 50 different sets of state standards is that today, different states cover different topics at different grade levels. Coming to consensus guarantees that from the viewpoint of any given state, topics will move up or down in the grade level sequence. This is unavoidable. What is important to keep in mind is that the progression in the Common Core State Standards is mathematically coherent and leads to college and career readiness at an internationally competitive level. (Link to Learning Progressions here)

**Myths About Implementation & Assessment of the *Standards***

**Myth:** The *Standards* tell teachers what to teach.

**Fact**: The best understanding of what works in the classroom comes from the teachers who are in them. That’s why these standards will establish *what* students need to learn, but they will not dictate *how* teachers should teach. Instead, schools and teachers should analyze curriculum and supplemental resources and decide how best to help all students reach the standards.

**Myth:** There are textbooks available now, that are aligned to the *Standards*.

**Fact:** There are many publishers claiming to have textbooks that are aligned to the *Standards*, however with the final draft of the Common Core Mathematics Standards being released to the public on June 4, 2010, it is highly unlikely that publishers have had time to “rework” the entire contents of their textbooks at each grade level to align 100% to the *Standards*. Be cautious of publishers changing only the table of contents to match the *Standards* terms (i.e. Domain, Cluster, Standard) without changing the content inside. Phil Daro, Lead CCSS Writer, states implementing the *Standards* means getting away from the “coverage” business in mathematics textbooks and focus on building conceptual understanding that emphasize the Standards for Mathematical Practice in every lesson. Understanding mathematics is a key component of the *Standards*. It will take a great deal of time for publishers to align texts to the *Standards*. Until this happens, pay attention to NCTM and NCSM for supplemental resources that are aligned to the *Standards*. (Link to Curriculum Analysis Guide and NCTM here?)

**Myth:** The State Assessments will have items embedded next year that are similar to items students will see on the Smarter Balance “Pilot” Assessment in 2013-2014 and the CCSS Assessment scheduled for 2014-2015.

**Fact:** The Smarter Balance Assessment Consortium (SBAC) will begin writing items in 2011-2012 school year. Any assessment company claiming to have similar items is untrue. Currently, Kansas State Mathematics Assessment is only multiple choice and covers specific indicators. The SBAC has made it clear that the Common Assessment will assess all Domains and may include 1)multiple choice, 2)short answer, 3)constructed response, 4)performance, and 5)simulations. (Link to Melisa’s SBAC powerpoint here)

**Myth:** Since the Common Assessment is a few years away, schools need not worry about changes in instruction, resources, or assessments until 2014.

**Fact:** Schools and/or Districts that wait until the year of the Common Assessment will have students who are ill-prepared. Conversations need to be happening now as to professional development needed for teachers in order to prepare all students to be successful in mathematics.

The Standards for Mathematical Practice need to “come alive” in every classroom, THIS YEAR! The focus should not be on “answer getting” or “covering all the topics”, but teaching for understanding and providing opportunities for students to make sense of mathematics.

**Correct answers are essential... but they're part of the process, they're not the product. The product is the math the kids walk away with in their heads...**

*- Phil Daro*

*CCSS Lead Writer*

For more information, visit “An Interview with Phil Daro”: (<http://commoncore.pearsoned.com/index.cfm?locator=PS11Ye>) and

Linda Darling Hammond, CCSS Research Consultant, “Internationally Competitive”

Mathematics Topics:

1. [What advice do you have for districts about revising curriculum?](http://www.americaschoice.org/uploads/Common_Core_Standards_Resources/PDaro_Transitioning/PDaro_Transitioning.html)
2. [What should principals look for in the classroom?](http://www.americaschoice.org/uploads/Common_Core_Standards_Resources/PDaro_Administrators/PDaro_Administrators.html)
3. [How do you create better standards in math?](http://www.americaschoice.org/uploads/Common_Core_Standards_Resources/PhilDaro_MathStandards/PhilDaro_MathStandards.html)
4. [What does math college readiness mean?](http://www.americaschoice.org/uploads/Common_Core_Standards_Resources/PhilDaro_CollegeReadiness/PhilDaro_CollegeReadiness.html)